

**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1000 Natomas

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	18.28	09/13/2016 09/14/2016	Sterling York

LM Start		Rating **	A	Issue No.	18
LM End		Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Operations & Maintenance Manuals			°	°
DWR ID	DWR_RD1000_01_f_2014_18				
Comment Code					
Inspector Comment					
RD 1000 has a copy of the O&M manuals at their district office.					

No Photos

LM Start		Rating **	A	Issue No.	24
LM End		Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Emergency Supplies & Equipment			°	°
DWR ID	DWR_RD1000_01_f_2014_24				
Comment Code					
Inspector Comment					
RD 1000 has flood fight supplies on hand at their equipment yard located near Unit 4.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	18.28	09/13/2016 09/14/2016	Sterling York

LM Start		Rating **	A	Issue No.	39
LM End		Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Flood Preparedness & Training			°	°
				°	°
DWR ID	DWR_RD1000_01_f_2014_39				
Comment Code					
Inspector Comment					
RD 1000 employees attend the DWR flood fight class held at CalExpo annually.					

No Photos

LM Start	0.00	Rating **	A	Issue No.	88
LM End	12.30	Issue Type +	Ma	Location *	LS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		38.780502°	38.649896°	
			-121.603437°	-121.571261°	
DWR ID	DWR_RD1000_01_f_2016_88				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
The Levee has no unwanted vegetation blocking visibility or access. The annual grasses are mowed making the slopes visible and accessible.					

Photo 1 of 1 : FA_2016_RD1000_31_88_20160919_00051.jpg



View looking upstream landside of maintained annual grasses.

LM Start	0.00	Rating **	A	Issue No.	77
LM End	12.30	Issue Type +	Ma	Location *	WS
Category	Earthen Levee		GPS Latitude/Longitude		
			Start	End	
Item	Vegetation		38.780502°	38.649896°	
			-121.603437°	-121.571262°	
DWR ID	DWR_RD1000_01_f_2016_77				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
The Levee has no unwanted vegetation blocking visibility or access. The annual grasses are mowed making the slopes visible and accessible.					

Photo 1 of 1 : FA_2016_RD1000_31_77_20160919_00050.jpg



View looking upstream waterside of maintained annual grasses.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	18.28	09/13/2016 09/14/2016	Sterling York

LM Start	0.48	Rating **	M	Issue No.	3
LM End	0.61	Issue Type +	Ma	Location *	WS
Category	Supplemental			GPS Latitude/Longitude	
				Start	End
Item	2015 USACE Erosion Survey, DRAFT			38.774507 °	38.772921 °
				-121.598865 °	-121.597788 °
DWR ID	DWR_RD1000_01_s_2016_3				
Comment Code					
Inspector Comment					
1997 - Very cohesive toe. 2005 - Site was staked and rock was stockpiled along the top of the bank. 2010 - New adjacent levee under construction. 2011 - New animal burrow. 2015: No observed changes. [2015 Site ID: SAC_78-3_L]					

Photo 1 of 1 : FA_2016_RD1000_31_3_20160906_00003.jpg



USACE 2013 Photo #1

LM Start	12.30	Rating **	A	Issue No.	97
LM End	18.08	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.649896 °	38.603918 °
				-121.571262 °	-121.514370 °
DWR ID	DWR_RD1000_01_f_2016_97				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1000_31_97_20160919_00066.jpg



View looking downstream landside of maintained annual grasses.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	18.28	09/13/2016 09/14/2016	Sterling York

LM Start	14.25	Rating **	M	Issue No.	57
LM End	14.27	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.624446°	38.624073°
				-121.560337°	-121.560346°
DWR ID	DWR_RD1000_01_s_2015_57				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

No Photos

LM Start	16.34	Rating **	A	Issue No.	99
LM End	17.79	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.600089 °	38.604709 °
				-121.544331 °	-121.519644 °
DWR ID	DWR_RD1000_01_f_2016_99				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 1000 Natomas

View looking downstream landside of trees that need to be trimmed. Fall 2016.

View of the trees on the landside levee slope. Small trees 4" in diameter at chest height should be removed before they get to big.

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Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1000 Natomas

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 American River	Right	2.32	09/13/2016 09/13/2016	Sterling York

LM Start	1.79	Rating **	M	Issue No.	3
LM End	2.07	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.606566°	38.605012°
				-121.479695°	-121.474813°
DWR ID	DWR_RD1000_02_f_2016_3				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					
Trees need to be trimmed. Fall 2016.					

Photo 1 of 1 : FA_2016_RD1000_32_3_20160919_00005.jpg



View looking upstream waterside of trees that need to be trimmed. Fall 2016.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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**Flood Control Project Maintenance
Levee Inspections**

Maintenance Issue Types Only, Levee Inspection Report By Mile - Fall 2016

Reclamation District No. 1000 Natomas

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Natomas East Canal	Right	16.93	09/13/2016 09/13/2016	Sterling York

LM Start	0.09	Rating **	A	Issue No.	6
LM End	16.66	Issue Type +	Ma	Location *	WS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.606882 °	38.823080 °
				-121.469480 °	-121.539803 °
DWR ID	DWR_RD1000_03_f_2016_6				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
Annual grasses have been mowed.					

Photo 1 of 1 : FA_2016_RD1000_33_6_20160914_00015.jpg



View waterside looking upstream of maintained vegetation.

LM Start	0.09	Rating **	A	Issue No.	11
LM End	16.66	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Vegetation			38.606882 °	38.823080 °
				-121.469480 °	-121.539804 °
DWR ID	DWR_RD1000_03_f_2016_11				
Comment Code					
V1 : Control annual grass and weeds on the levee slopes and easements.					
Inspector Comment					
Annual grasses have been mowed and all new growth was being sprayed 9/13/16.					

Photo 1 of 1 : FA_2016_RD1000_33_11_20160915_00023.jpg



View looking upstream landside of the mowed annual grass.

*** Location**

LS : Land Side N/A : Not Applicable
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

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Reclamation District No. 1000 Natomas

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Natomas East Canal	Right	16.93	09/13/2016 09/13/2016	Sterling York

LM Start	0.23	Rating **	A/W	Issue No.	20
LM End	0.23	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.608814 °	38.608814 °
				-121.468469 °	-121.468469 °
DWR ID	DWR_RD1000_03_f_2015_20				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					
There is a foot path up the slope of the levee but it has not damaged the integrity of the levee enough to warrant an M rating. This path should be monitored and maintained to avoid a future maintenance issue.					

No Photos

LM Start	0.38	Rating **	A/W	Issue No.	19
LM End	0.38	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.610854 °	38.610854 °
				-121.467961 °	-121.467961 °
DWR ID	DWR_RD1000_03_f_2015_19				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Bait injection into rodent hole for control. No sign of rodents Fall 2016.					

Photo 1 of 2 : FA_2016_RD1000_33_19_20160906_00013.jpg



View of the rodent on the waterside levee slope ready to retreat into the den, penetrating the levee prism.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 1000 Natomas

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Natomas East Canal	Right	16.93	09/13/2016 09/13/2016	Sterling York

LM Start	0.38	Rating **	A/W	Issue No.	19 (cont)	
LM End	0.38	Issue Type +	Ma	Location *	LS	
Category	Earthen Levee			GPS Latitude/Longitude		
				Start	End	
Item	Animal Control			38.610854 °	38.610854 °	
				-121.467961 °	-121.467961 °	
DWR ID	DWR_RD1000_03_f _ 2015_19					
Comment Code						
A1 : Exterminate rodents and backfill and compact or grout burrows.						
Inspector Comment						
Bait injection into rodent hole for control. No sign of rodents Fall 2016.						

Photo 2 of 2 : FA_2016_RD1000_33_19_20160906_00014.jpg



View of the rodent holes on the waterside levee slope. Fall 2015. Bait injection into rodent hole for control, no sign of rodents Fall 2016.

LM Start	1.44	Rating **	A/W	Issue No.	18
LM End	1.44	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.626111 °	38.626111 °
				-121.470575 °	-121.470575 °
DWR ID	DWR_RD1000_03_f_2015_18				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					
There is a foot path up the slope of the levee but it has not damaged the integrity of the levee enough to warrant an M rating. This path should be monitored and maintained to avoid a future maintenance issue.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 1000 Natomas

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Natomas East Canal	Right	16.93	09/13/2016 09/13/2016	Sterling York

LM Start	2.36	Rating **	M	Issue No.	15
LM End	2.36	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.639326°	38.639326°
				-121.473107°	-121.473107°
DWR ID	DWR_RD1000_03_f_2015_15				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1000_33_15_20160906_00012.jpg



View of the landside levee slope damaged by foot traffic.

LM Start	2.74	Rating **	A/W	Issue No.	16
LM End	2.74	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Slope Stability			38.644796 °	38.644796 °
				-121.474135 °	-121.474135 °
DWR ID	DWR_RD1000_03_f_2015_16				
Comment Code					
S2 : Repair the levee slope damaged by foot traffic and prevent access where possible.					
Inspector Comment					
There is a foot path up the slope of the levee but it has not damaged the integrity of the levee enough to warrant an M rating. This path should be monitored and maintained to avoid a future maintenance issue.					

No Photos

LM Start	3.29	Rating **	C	Issue No.	12
LM End	3.29	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.652670 °	38.652670 °
				-121.475588 °	-121.475588 °
DWR ID	DWR_RD1000_03_s_2015_12				
Comment Code					
A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.					
Inspector Comment					
No evidence of rodent activity in Fall 2016.					

No Photos

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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Reclamation District No. 1000 Natomas

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Natomas East Canal	Right	16.93	09/13/2016 09/13/2016	Sterling York

LM Start	4.78	Rating **	A/W	Issue No.	1
LM End	4.89	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Animal Control			38.672913 °	38.673685 °
				-121.481364 °	-121.483115 °
DWR ID	DWR_RD1000_03_f_2013_1				
Comment Code					
A1 : Exterminate rodents and backfill and compact or grout burrows.					
Inspector Comment					
Several bait traps line the levee toe, no sign of rodents.					

Photo 1 of 2 : FA_2016_RD1000_33_1_20160906_00003.jpg



This photo was taken from the levee crown looking down the landward slope at a squirrel poking its head out of a hole. Fall 2014.

LM Start	4.78	Rating **	A/W	Issue No.	1 (cont)
LM End	4.89	Issue Type +	Ma	Location *	LS

Photo 2 of 2 : FA_2016_RD1000_33_1_20160914_00020.jpg



Updated view taken facing the landside looking upstream at bait trap. Rodent holes have been filled and no new activity was observed. Several bait traps at landside levee toe. Fall 2016.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown	** Rating A : Acceptable M : Minimally Acceptable U : Unacceptable	N : Not Inspected/Rated C : Corrected A/W : Acceptable but Monitor & Maintain	+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement
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Reclamation District No. 1000 Natomas

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 03 Natomas East Canal	Right	16.93	09/13/2016 09/13/2016	Sterling York

LM Start	5.96	Rating **	C	Issue No.	14
LM End	5.96	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Trim / Thin Trees			38.688281°	38.688281°
				-121.485553°	-121.485553°
DWR ID	DWR_RD1000_03_f_2015_14				
Comment Code					
T1 : Trim trees to at least five feet above ground level.					
Inspector Comment					

No Photos

LM Start	16.52	Rating **	A	Issue No.	21
LM End	16.52	Issue Type +	Ma	Location *	LS
Category	Earthen Levee			GPS Latitude/Longitude	
				Start	End
Item	Emergency Supplies & Equipment			38.824246°	38.824246°
				-121.537720°	-121.537720°
DWR ID	DWR_RD1000_03_f_2016_21				
Comment Code					
Inspector Comment					

Photo 1 of 1 : FA_2016_RD1000_33_21_20160914_00017.jpg



View of stockpiled flood fight material on landside.

* Location LS : Land Side N/A : Not Applicable WS : Water Side CR : Crown		** Rating A : Acceptable N : Not Inspected/Rated M : Minimally Acceptable C : Corrected U : Unacceptable A/W : Acceptable but Monitor & Maintain		+ Issue Type Ma : Maintenance Deficiency Ob : Design & System Obsolescence En : Enforcement	
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Reclamation District No. 1000 Natomas

View looking upstream landside of maintained vegetation.

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